

Title: Shapes and Solids Scavenger Hunt

Link to Outcomes:

- **Problem Solving** Students will acquire confidence in using mathematics meaningfully.
- **Communication** Students will relate physical materials, pictures, and diagrams to mathematical ideas.
- **Reasoning** Students will justify their answers and solution processes.
- **Connections** Students will link conceptual and procedural knowledge.
- **Geometry And Spatial Sense** Students will recognize and appreciate geometry in their world.

Brief Overview:

The students will recognize the characteristics of shapes and solids with real-life objects. In pairs, the students will complete a shapes and solids scavenger hunt task. Once completed, the students will record shapes and solids found in the classroom and justify their answers using appropriate mathematical vocabulary.

Grade/Level:

Grade 3

Duration/Length:

One class session should be allocated for this lesson.

Prerequisite Knowledge:

Students should have working knowledge of the following skills:

- Names of polygons: pentagon, hexagon, heptagon, octagon, nonagon, and decagon
- Line segments
- Vertex of an angle
- Names of solid figures: cube, sphere, cylinder, cone, and rectangular prism
- Faces and edges of a solid figure

Objectives:

- Students will identify polygons: pentagon, hexagon, heptagon, octagon, nonagon, and decagon.
- Students will identify characteristics of polygons.
- Students will identify solid figures: cube, sphere, cylinder, cone, and rectangular prism.
- Students will identify characteristics of solid figures.

Materials/Resources/Printed Materials:

- *Shapes and Solids Scavenger Hunt* recording sheet (Student Resource #2)
- Fifteen two-dimensional real-life objects
- Fifteen three-dimensional real-life objects
- A bag or box to hold objects

Development/Procedures:

- The teacher will distribute shapes and solid figures from the bag. Each student should have one shape or solid figure. Ask the students to pair with a partner and discuss the characteristics of the shapes. Remind the students to name the polygon or solid figure and use mathematical vocabulary when describing their shape.
- Ask the students to record in their journals, pictures and characteristics of the shapes in the pictures.
- The teacher will explain the *Shape and Solids Scavenger Hunt* activity. Each student will need one recording sheet, something on which to write, and a pencil. Ask the students to work in pairs to find shapes and solid figures in the classroom. Students should find objects in the classroom that are one of the shapes on their recording sheets. They could draw the figures or write the name of the figures in the “Object” column. Then, the students should record the characteristics of the figures in the “How do you know” column.
- Ask the students to share their scavenger hunt findings with the class and discuss the different objects they found for each shape.

Evaluation:

The teacher will observe the students’ *Shapes and Solids Scavenger Hunt* recording sheets and their math journal responses.

The teacher will observe the students working cooperatively with their partners.

Extension/Follow Up:

Ask the students to use the shapes and solid figures from the bag to categorize the items based on their characteristics. Repeat this several times and discuss the characteristics of the shapes and solid figures. Leave the bag of objects in the classroom for students to use as a math center.

Authors:

Heidi Balter
Pointers Run Elementary
Howard County

Melissa Harlow
Manor Woods Elementary
Howard County

Shapes and Solids Scavenger Hunt

Objects

How Do You Know?

		
		
		
		
		
		
		
		